



Retrospect Remote's numerous selection options let users or administrators control exactly which files get backed up over the network. The new Restore Volumes Exactly option will back up empty folders and restore the disk's boot blocks.

Enhanced network backup in Retrospect Remote

By Dan Magorian

Over the past year, Dantz Development Corp.'s Retrospect has emerged as the leading backup utility for everything beyond simple floppy backups. The program has proven popular because of its flexible features, relatively straightforward interface and reliability as well as the availability of drivers for many kinds of storage media. Retrospect is popular not only with users but with manufacturers; many tape-drive vendors, including Apple, have dropped their own backup software to bundle Retrospect. Now Dantz has introduced Retrospect Remote to address a major problem on many Mac networks: how to ensure that individual users back up their hard disks.

Handling the 'B word.' Getting people to back up their data is always difficult. Backing up is about as exciting as watching paint dry. Whether you're pushing and pulling floppies in and out endlessly or baby-sitting a drive to change tapes, it's a hassle, so most people don't bother. One popular network solution is to have only standardized applications on the local disks and train users to save all documents to a file server, which is backed up by the administrator. This works fine, but many sites lack the discipline or organization to carry it out or are not able to justify the cost of the server needed to make it work.

The idea of an automatic process

that copies data on local hard disks across the network — without bothering users — is attractive. This is what Retrospect Remote promises. To make the process work, you need someplace to put a really big archive file. A tape drive on the network administrator's Mac is the usual choice, but don't think that old 40-Mbyte DC2000 is going to cut it. One of the newer multigigabyte digital audio tape (DAT) or 8mm tape drives is a better choice. The idea is that you pop in a tape and leave your Mac on when you leave work. At a preset time that night, Retrospect starts the drive streaming away and finishes backing up everyone's data by morning.

How does it work? The center of Retrospect Remote is Retrospect 1.2, which can do backups in the background under MultiFinder and has new features that let it receive data from across the network. Installation is easy. You copy the application and Help file onto your hard disk and two Startup documents (INITs) into your System folder. Software for each client Mac is simply a Control Panel device (cdev) and ADSP (AppleTalk Data Stream Protocol) driver. The cdev allows each user to turn remote access on or off, adjust the MultiFinder priority of the backup process and restrict remote access to local folders. The clients are serialized, so you must enter the supplied activator codes on the central backup Mac. The package

comes with 10 such codes; additional 10-packs are available.

When everything is running, the client Macs show up automatically on the central backup station. There you enter a password to prevent others from accessing files on remote volumes. The list of ready clients shows not only the activator code for each but also machine type, amount of RAM, system version, currently running application, how much each clock is offset (important for selecting files by time) and client response time over the network. This information has some handy side benefits for network monitoring, but it's no replacement for sophisticated inventory programs.

Finding the features. In general, the latest Retrospect strikes a good balance between ease of use and power features, and it should satisfy people who just want to get the job done as well as those who

See *Remote*, Page 84

Sample Retrospect backup times	
Times in minutes:seconds	
Local backup to tape	28:00
Over LocalTalk through router	29:50
Over Ethernet	29:04
Three clients over Ethernet (51 Mbytes of documents)	28:29
Over Ethernet to NFS disk	13:12

Backups were performed on a host Mac II with 2 Mbytes of RAM, a 40-Mbyte hard disk and an Apple 40-Mbyte tape drive. The client was a Mac IIfx with 8 Mbytes of RAM and an 80-Mbyte hard disk. Backups were run under System 6.0.5 with MultiFinder on, using 29 Mbytes of folders and files with Retrospect's default backup options selected. The NFS disk was a VAXstation 5100 mounted on the network through The Wollongong Group's MacNFS.

ON BALANCE Retrospect Remote

Dantz Development Corp.

List price: \$495; additional 10-packs: \$295



Excellent new release of solid backup software that solves the pressing need to be able to back up local hard disks over the network to a non-dedicated, central Mac. Superior support for all major tape drives and other backup media.

Remote

From Page 82

want to control every detail. It automatically recognizes the type of peripheral you have attached and even allows backup to remote disks. There are numerous scripting, calendaring, retrieving, file-selection and security functions (too many to detail here). In a wide range of tests, all seemed to work well and easily.

Users of previous versions will appreciate new options for Always Full Backup; Restore Volume Exactly, which includes disk boot blocks and empty folders; and Multiple Volumes, which backs up several local or remote disks with one script. There are also handy modes for backing up and deleting seldom-used applications to save disk space.

Confidential data traveling over unsecured networks from the clients to the central backup Mac also can be encrypted.

In tests backing up both network clients and local disks, Retrospect performed quickly and reliably. The performance bottleneck was the tape drive used for testing rather than the network (whether over LocalTalk or Ethernet), even across multiple routers. However, if you have a heavily loaded LocalTalk and a fast tape drive, this may not be the case. We also backed up client Macs to a large DECStation disk using The Wollongong Group Inc.'s MacNFS, and it was much faster than backing up to tape, confirming our experience and Dantz's predictions. In general, Retrospect's performance was excellent.

Conclusions. Retrospect is a solid package with excellent features. The documentation is very good, but we found that it was often not needed because of the easy-to-use interface. There are a few limitations, usually well-noted in the documentation. For example, the client INIT doesn't run on AppleShare or electronic-mail servers.

It would be nice if new tape drivers were available separately instead of via an application upgrade, but significant upgrades, such as the one to Version 1.2, are clearly worth it.

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